

#6att



SEQUENCE LISTING

<110> Novak, Rodger
Toumanen, Elaine

<120> NOVEL ANTIBIOTICS AND METHODS OF USING THE SAME

<130> 1340-1-016N

<140> 09/305,984

<141> 1999-05-05

<150> 60/084,399

<151> 1998-05-06

<160> 54

<170> PatentIn Ver. 2.0

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<212> DNA

<213> Streptococcus pneumoniae

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<212> PRT

<213> Streptococcus pneumoniae

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Asp Lys Arg Pro Ala Arg Asp Tyr Asn
20 25

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Encodes

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<223> Description of Artificial Sequence: Modified
Streptococcus Pneumonia peptide

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1 5 10 15
Asp Lys Arg Pro Ala Arg Asp Tyr Asn
20 25

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<223> Description of Artificial Sequence: Encodes
modified Streptococcus Pneumonia peptide

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<212> PRT
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<212> PRT

<213> Streptococcus pneumoniae

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<212> DNA

<213> Streptococcus pneumoniae

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<211> 442

<212> PRT

<213> Streptococcus pneumoniae

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			180					185					190		
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Met Arg Glu Asn Ile Gly Arg Tyr Lys Asp Arg Asp Gln Tyr Leu Gly
260 265 270

Val Ala Leu Gly Ile Val Asp Glu Leu Asn His His Val Leu Gln Ile
275 280 285

Leu Ser Leu Ser Ser Val Gln Glu Leu Arg Asp Asp Arg Glu Thr Ile
290 295 300

Asp Leu Leu Gln Met Thr Gln Asn Leu Val Lys Asp Tyr Ala Leu Leu
305 310 315 320

Ala Lys Glu Arg Glu Leu Gln Ile Asp Asn Ser Leu Thr His Gln Gln
325 330 335

Ala Tyr Leu Asn Pro Ser Val Met Lys Leu Ile Leu Ser Asn Leu Ile
340 345 350

Ser Asn Ala Ile Lys His Ser Val Pro Gly Gly Leu Val Arg Ile Gly
355 360 365

Glu Arg Glu Gly Glu Leu Phe Ile Glu Asn Ser Cys Ser Ser Glu Glu
370 375 380

Gln Glu Lys Leu Ala Gln Ser Phe Ser Asp Asn Ala Ser Arg Lys Val
385 390 395 400

Lys Gly Ser Gly Met Gly Leu Phe Val Val Lys Ser Leu Leu Glu His
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Glu Lys Leu Ala Tyr Arg Phe Glu Met Glu Glu Asn Ser Leu Thr Phe
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<210> 15

<211> 657

<212> DNA

<213> Streptococcus pneumoniae

<400> 15

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tctagctatg aggtggccct ggttttactg gatattccaga tgcccaagct caacggctta 180
gaagtcctag ctgagattcg taaaaccagt caggttcctg tcttgatgtt gacagctttt 240
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<211> 218

<212> PRT

<213> Streptococcus pneumoniae

<400> 16

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35 40 45

Leu Leu Asp Ile Gln Met Pro Lys Leu Asn Gly Leu Glu Val Leu Ala
50 55 60

Glu Ile Arg Lys Thr Ser Gln Val Pro Val Leu Met Leu Thr Ala Phe
65 70 75 80

Gln Asp Glu Glu Tyr Lys Met Ser Ala Phe Ala Ser Leu Ala Asp Gly
85 90 95

Tyr Leu Glu Lys Pro Phe Ser Leu Ser Leu Leu Lys Val Arg Val Asp
100 105 110

Ala Ile Phe Lys Arg Tyr Tyr Asp Thr Gly Arg Ile Phe Ser Tyr Lys
115 120 125

Asp Thr Lys Val Asp Phe Glu Ser Tyr Ser Ala Ser Leu Ala Gly Gln
130 135 140

Glu Val Pro Ile Asn Ala Lys Glu Leu Glu Ile Leu Asp Tyr Leu Val
145 150 155 160

Lys Asn Glu Gly Arg Ala Leu Thr Arg Ser Gln Ile Ile Asp Ala Val
165 170 175

Trp Lys Ala Thr Asp Glu Val Pro Phe Asp Arg Val Ile Asp Val Tyr
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195 200 205

Arg Asn Val Gly Tyr Lys Leu Glu Arg Lys
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<210> 17

<211> 648

<212> DNA

<213> Streptococcus pneumoniae

<400> 17

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<211> 215

<212> PRT

<213> Streptococcus pneumoniae

<400> 18

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35 40 45

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Gln Gly Glu Asp Ile Arg Lys Lys Gly Tyr Ser Tyr His Arg Met His

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Pro Leu Glu Asn Ile Arg Leu Val Asn Lys Lys Ala Ser Lys Asn Thr						
	100		105		110	
Leu Leu Glu Leu Gly Leu Asp Glu Ser Gln Ile Lys Arg Asn Val Leu						
	115		120		125	
Gln Leu Ser Gly Gly Gln Gln Gln Arg Val Ala Ile Ala Arg Ser Leu						
	130		135		140	
Val Ser Glu Ala Pro Val Ile Leu Ala Asp Glu Pro Thr Gly Asn Leu						
145		150		155		160
Asp Pro Lys Thr Ala Gly Asp Ile Val Glu Leu Leu Lys Ser Leu Ala						
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Gln Lys Thr Gly Lys Cys Val Ile Val Val Thr His Ser Lys Glu Val						
	180		185		190	
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210		215				

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<211> 459

<212> PRT

<213> Streptococcus pneumoniae

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Ile Ser Ile Gln Thr Ser Asp Phe Ile Ile Ile Phe Val Leu Ala Leu
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Val Leu Val Val Leu Val Met Ala Leu Ala Ser Ser Asn Leu Leu Arg
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Lys Gln Pro Lys Glu Leu Leu Leu Asp Gly Glu
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<210> 21

<211> 1278

<212> DNA

<213> Streptococcus pneumoniae

<400> 21

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<210> 22

<211> 425

<212> PRT

<213> Streptococcus pneumoniae

<400> 22

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 35 40 45
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 50 55 60
 Gly Gln Thr Phe Lys Leu Ser Asp Leu Ala Ser Val Ser Lys Ile Lys
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<210> 26

<211> 25

<212> PRT

<213> *Methanococcus jannaschii*

<400> 26

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Met Glu Arg Pro Trp Cys Ser Leu Val
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<210> 27

<211> 25

<212> PRT

<213> *Haemophilus influenzae*

<400> 27

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Ser Ser Leu Leu Asp Gly Val Lys Ile Ala Ser Gly Asn Leu Leu Ala
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Ser Thr Lys Pro Ser Gly Asn Phe Asn
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<210> 28

<211> 25

<212> PRT

<213> *Haemophilus influenzae*

<400> 28

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Tyr Arg Ile Tyr Arg Ser Ser His Asp
20 25

<210> 29

<211> 25

<212> PRT

<213> Haemophilus influenzae

<400> 29

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Asp Lys Lys Thr Pro Arg Cys Cys His
20 25

<210> 30

<211> 25

<212> PRT

<213> Archaeoglobus fulgidus

<400> 30

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1 5 10 15

Asp Lys Val Leu Cys Arg Asn Ser Tyr
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<210> 31

<211> 25

<212> PRT

<213> Archaeoglobus fulgidus

<400> 31

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<210> 32
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Gly Glu Glu Pro Ser Arg Arg Ser Cys
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<210> 33
<211> 25
<212> PRT
<213> Borrelia burgdorferi

<400> 33
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Ala Lys Asn Pro Ser Arg Tyr Phe Gly
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<210> 34
<211> 20
<212> PRT
<213> Synechocystis sp.

<400> 34
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Asp Phe Arg Pro
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<210> 35
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<400> 35
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Streptococcus Pneumonia peptide

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<400> 36
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Asp Lys Arg Pro Ala Arg Asp Xaa Asn
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<210> 37
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<220>
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<400> 37
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<220>
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<400> 38
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Streptococcus Pneumonia peptide

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<400> 39

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<210> 40

<211> 8

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<213> Streptococcus pneumoniae

<400> 40

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<211> 7

<212> PRT

<213> Streptococcus pneumoniae

<400> 41

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<210> 42
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<400> 42
Leu Ser Ser Gly Gln Leu Leu
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Xaa Xaa Xaa Xaa Ala Xaa Xaa Xaa Asn
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<210> 44
<211> 27
<212> PRT
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<400> 44
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Asp Lys Arg Pro Ala Arg Asp Tyr Asn Arg Lys
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<210> 45
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<212> DNA
<213> Streptococcus pneumoniae

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atgagaaaagg aatttcacaa cgttttatct agtggtcagt tgcttgcaga caaaaggcca 240
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<210> 46
<211> 23
<212> DNA
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<220>
<223> Description of Artificial Sequence: Primer

<400> 46
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<210> 47
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Streptococcus Pneumonia peptide

<400> 47

Met Arg Lys Glu Phe His Asn Val Leu Ser Ala Gly Gln Leu Leu Ala
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Asp Lys Arg Pro Ala Arg Asp Tyr Asn Arg Lys
20 25

<210> 48

<211> 30

<212> PRT

<213> Streptococcus pneumoniae

<400> 48

Met Glu Phe Met Arg Lys Glu Phe His Asn Val Leu Ser Ser Gly Gln
1 5 10 15

Leu Leu Ala Asp Lys Arg Pro Ala Arg Asp Tyr Asn Arg Lys
20 25 30

<210> 49

<211> 26

<212> DNA

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<223> Description of Artificial Sequence: Primer

<400> 49

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<210> 50

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<223> Description of Artificial Sequence: Primer

<400> 50

attaaggatc cagctatcaa 20

<210> 51

<211> 23

<212> DNA
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<400> 51
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<210> 52
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<220>
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<400> 52
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<210> 53
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gcaagagact ataatagaaa a 81

<210> 54
<211> 90
<212> DNA
<213> Streptococcus pneumoniae

<400> 54
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aaaaggccag caagagacta taatagaaaa 90